## West Virginia Water Festival Curriculum

Information Guide

Nearly 50 percent of all millenials surveyed admitted they did not know where their water source came from (Huffington Post, 2016) nor are most youth familiar with the name of the watershed they live in. Project WET's (Water Education Today) mission is to advance water education to understand global challenges and inspire local solutions. One way we reach this mission is by organizing and inspiring community water events, such as water festivals. In 2019, the West Virginia Project WET

program collaborated with the New River Gorge National River and other agencies to host 15 water festivals in Kanawha, Cabell, Nicholas, Ritchie, Favette, Wetzel, Pocahontas, Wyoming, and Raleigh counties. Through our combined efforts, over 3,400 young mountaineers attended and participated in various hands-on water education stations including nonpoint source pollution, water conservation, stream ecology, acid rain, the water cycle, and more. West Virginia has nearly 40,000 stream miles, making it one of the highest stream densities of any region in North America. It is no surprise that a water education program



would be very successful in our wild and wonderful water-rich state.

In an effort to make our water festivals a more robust educational experience, WV Project WET and New River Gorge National River partnered to develop the West Virginia Water Festival Curriculum. The curriculum is most suitable for fifth grade classrooms, but can be adjusted for third through sixth. It is composed of seven different lesson plans that align with hands-on stations at our water festival events. Each lesson plan includes pre/post quizzes created through the online quiz platform, Quizizz; YouTube videos to reinforce main objectives; an activity complete with warm-up and wrap up instructions and correlated to NGSS and Common Core standards; instructional videos that teachers can use as aids or show directly to their students (especially helpful with e-learning); and several

virtual and in-person activity

extensions.

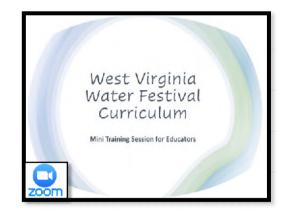
Due to the COVID-19 pandemic, all water festivals for the fall of 2020 have been canceled. Until we can hold in-person water festivals, the extensions listed in the lesson plans are safe and educational substitutions for our water festivals' hands-on learning stations.





#### ONLINE EDUCATOR MINI TRAINING SESSIONS:

As part of the West Virginia Water Festival Curriculum, training sessions will be offered to any interested educator through the online Zoom platform. It should be noted that the curriculum is most suitable for fifth grade classrooms, but can be adjusted for third through sixth. Four sessions are currently scheduled below (additional sessions may be requested or added). Educators interested in attending should click on the link under the date and time they want to attend and register using their name and email address. After registering, a confirmation email containing information about joining the meeting will be shared.



- Option 1: Monday, October 12<sup>th</sup> at 2:00 PM Registration Link: https://us02web.zoom.us/meeting/register/tZAudOyppzotHdRrZbNDXPKGDqQanEJvMPPd
- Option 2: Wednesday, October 14<sup>th</sup> at 10:00 AM Registration Link: https://us02web.zoom.us/meeting/register/tZYkc-ypqigsGNM-ULR5Zf9Ky-8KWKMkT-BP
- Option 3: Tuesday, October 20th at 6:00 PM Registration Link: https://us02web.zoom.us/meeting/register/tZ0vcOqopjosGdDgYx9oB-OEHdqNw4UaZZ-Z
- Option 4: Wednesday, October 21st at 2:00 PM Registration Link: https://us02web.zoom.us/meeting/register/tZYpc--gqTgiGNCageeDLJDREAP-laxuXWeh

#### HOW TO ACCESS THE LESSON PLANS:

The lesson plans and instructional videos have been uploaded to Schoology and the password can be shared to any qualifying educator. To qualify for the passcode, please copy and paste the questions below and send responses by email to Tomi Bergstrom (tomi.m.bergstrom@wv.gov):

- 1. Name:
- 2. Email:
- 3. School/Grade:
- 4. Number of Students:
- 5. Have you attended a water festival in past years?
- 6. Are you interested in attending an in-person water festival?

7. Are you interested in getting trained in the Project WET Curriculum and Activity Guide 2.0? Questions can be directed to the WV Project WET Coordinator, Tomi Bergstrom. Email:

Tomi.M.Bergstrom@wv.gov Phone: 304-926-0499 Ext.43862





# WEST VIRGINIA WATER FESTIVAL

## CURRICULUM



## A Water Education Curriculum

NOTE: Due to the COVID-19 pandemic, all water festivals for the fall of 2020 have been canceled. Until we can hold in-person water festivals with hands-on learning stations, each lesson plan has been fitted with extensions that can be completed in the classroom or online.

**GOAL**: The WV Water Festival Curriculum will help students develop an understanding of the importance

of water; how it is used, managed, and moves through our natural systems. The lesson plans will

prepare students for an outdoor educational experience at a water festival.

**PURPOSE**: The West Virginia Water Festival Curriculum was developed by New River Gorge National River and

West Virginia's Project WET program for water festivals in West Virginia. These seven lesson plans will teach participants about water resources both locally and around the world and how they affect

those resources.

#### **OBJECTIVES:** Students will be able to:

- 1. Understand why water is important in our lives.
- 2. Identify ways they use water.
- 3. Identify the three states of matter that water moves through.
- 4. Understand how water moves across our planet.
- 5. Learn ways that people use water every day.
- 6. Calculate an average daily amount of water each student uses.
- 7. Locate the main stem, tributaries, headwaters, mouth, and boundary of a watershed on simple maps.
- 8. Characterize the movement of water in a watershed based on elevation changes and discover how watersheds are named.
- 9. Identify animals that live in our streams and rivers.
- 10. Research and learn about different types of aquatic species.
- 11. Understand what stormwater is, how humans impact and pollute stormwater, and what are positive actions students can take to reduce stormwater pollution.
- 12. Differentiate between point and nonpoint source pollution.
- 13. Recognize how everyone is responsible for their local water quality.

#### CURRICULUM LESSON PLANS WITH CORRELATING WATER FESTIVAL STATIONS:

LP1—Why is Water Important? Various Water Festival Stations

LP2—Water Movement The Incredible Journey and Water Cycle Stations

LP3—How much Water do I use? Water Conservation Station

LP4—Investigating Watersheds

Blue River Watershed and Seeing Watersheds Stations

LP5—At Home in the River

Stream Ecology, Aquatic Life, and MacroMayhem Stations

LP6—Stormwater Freddy the Fish and Stormwater Obstacle Course Stations

LP7—Nonpoint Source Pollution Water Monitoring, Enviroscape and Groundwater Model Stations

Each lesson plan is supplemented with YouTube videos and online quizzes using the online game style platform, Quizizz. The quiz can be offered to students as a real-time group game or be assigned individually.

To learn more about water festivals visit:

www.dep.wv.gov/WWE/getinvolved/WET/Pages/WaterFestivals.aspx



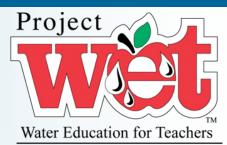
### **Additional Resources**

For free online interactive learning, visit: www.discoverwater.org



Children's Activity Booklets, visit: www.store.projectwet.org





### WEST VIRGINIA

Department of Environmental Protection



## **West Virginia Project WET**

WV Department of Environmental Protection Division of Water and Waste Management Watershed Improvement Branch 601 57th Street SE Charleston, WV 25304

### **Contact the WV PWET Coordinator:**

Ms. Tomi Bergstrom

Phone: 304-926-0499 ext. 1098

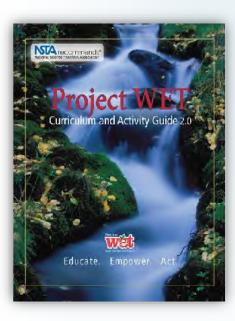
Fax: 304-926-0496

E-mail: Tomi.M.Bergstrom@wv.gov

WV Project WET Website: http://go.wv.gov/pwet

## West Virginia Project WET

Water Education for Teachers



The West Virginia Department of Environmental Protection sponsors Project WET workshops throughout the state of West Virginia.



Promoting a healthy environment.

### What is Project WET?

Project WET is an international, interdisciplinary water science and education program for prek-12 educators of all sorts—homeschool, public and private school teachers, water resource professionals, youth club leaders and many others.

The Project WET curriculum was developed through collaboration of teachers, scientists, and resource professionals. The program correlates with appropriate state and national standards of learning, and strongly supports STEM principles.

Project WET believes that educators hold the key to empowering people to effect sustainable, positive change in local communities for the benefit of all water users.

Sponsored by the WV Department of Environmental Protection, the Project WET program addresses atmospheric water, surface water, groundwater, cultural and historical uses of water, and contemporary water management issues such as stormwater management and nonpoint source pollution.



Project WET makes water education FUN and helps educators meet their objectives in an innovative way. The activities are designed to complement existing curricula rather than displace or add additional concepts in the classroom. Project WET activities are interdisciplinary, hands-on, and engaging to make water education fun for students and teachers.

## **Project WET Workshops**

Become certified in Project WET by attending a six-hour workshop! Workshops are free, utilize Project WET hands-on activities, and are conducted throughout the state.

All Educator Workshop attendees will receive:

 A hard copy of the Project WET Curriculum and Activity Guide 2.0



## Have you already been trained, but don't have the 2.0 Guide?



Attend an ONLINE
refresher course to
receive the Project
WET Curriculum and
Activity Guide 2.0 for
\$74.95 or contact your
state coordinator to
attend a refresher
workshop in person
for FREE!

### Water Festivals

Water Festivals are generally a one-day water education event for 5<sup>th</sup> grade students. The festivals are designed to heighten children's awareness about natural resources and their role in helping to protect them. Water festivals are held



A Journey Into Water Educatio

globally to educate students about water in fun, interactive environments. Students rotate through the water festival's structured learning stations and exhibits. Each station offers engaging hands-on water activities and investigations.

Station topics may focus on:

- •the water cycle
- ground water
- water quality
- stream ecology
- molecular properties
- wetland functions
- •water management
- water conservation
- •water properties soils
- non-point source pollution/stormwater

Contact us for more information on how to plan a water festival in your community!





